











# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18  
Stylesheet Version v18.0

Title of Invention	Server and Multiple Sensor System for Monitoring Activity in a Shared Radio Frequency Band						
Application Number:	10/717852						
Confirmation Number:	1708						
First Named Applicant:	Neil Diener						
Attorney Docket Number:	Cognio109US						
Art Unit:	2681						
Search string:	( 4839582 or 5608727 or 6084919 or 6418131 or 6385434 or 6229998 or 6351643 or 5093927 or 5142691 or 5355522 or 5276908 or 6332076 or 6349198 or 5144642 or 5907812 or 5745777 or 6336780 or 6275695 or 6169728 or 6141565 or 5809427 or 5610839 or 5608727 or 5574979 or 6256478 or 6374082 or 6499006 or 6317599 or 6442507 or 6229799 or 5850596 or 6307839 or 5655217 or 5889772 or 6031833 or 5636140 or 6295461 or 5732077 or 5864541 or 5428819 or 6167237 or 6374079 or 5636903 or 6212566 or 20030123420 or 20020086641 or 20020155811 or 20020142744 or 20020177446 or 20020050012 or 20020019214 or 20020085503 or 20020154614 or 20010008837 or 20020077787 or 20020006799 or 20020111772 or 20030198200 or 20030198304 or 20030224741 or 20040023674 or 20040028003 or 20040028123 ).pn.						
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	4839582	1989-06-13	Fukaya et al.		324	77B
	2	5608727	1997-03-04	Perreault et al		370	462
	3	6084919	2000-07-04	Kleider et al.	A1	375	285
	4	6418131	2002-07-09	Snelling et al.	B1	370	337
	5	6385434	2002-05-07	Chuprun et al.	B1	455	11.1

APP\_ID=10717852

Page 1 of 3

BEST AVAILABLE COPY

6	6229998	2001-05-08	Hamdy et al.	B1	455	226.1
7	6351643	2002-02-26	Haartsen	B1	455	450
8	5093927	1992-03-03	Shanley		455	513
9	5142691	1992-08-25	Freeburg		455	63.3
10	5355522	1994-10-11	Demange		455	62
11	5276908	1994-01-04	Koohgoli et al		455	34.1
12	6332076	2001-12-18	Shah et al.		455	423
13	6349198	2002-02-19	Carlson et al.		455	63.1
14	5144642	1992-09-01	Weinberg et al.		375	10
15	5907812	1999-05-25	Van De Berg		455	461
16	5745777	1998-04-28	English et al.		375	228
17	6336780	2002-04-02	Obhan		455	423
18	6275695	2002-08-14	Obhan		455	423
19	6169728	2002-01-02	Perreault et al.		370	235
20	6141565	2000-10-31	Feuerstein et al.		455	560
21	5809427	1998-09-15	Perreault et al.		455	513
22	5610839	1997-03-11	Karolak et al.		455	450
23	5608727	1997-03-04	Perreault et al.		370	462
24	5574979	1996-11-12	West		455	63.1
25	6256478	2001-07-03	Allen		455	63.1
26	6374082	2002-04-16	Carlson		455	63.1
27	6499006	2002-12-24	Rappaport et al		703	20
28	6317599	2001-11-13	Rappaport et al		455	446
29	6442507	2002-08-27	Skidmore et al		702	186
30	6229799	2001-05-08	Caillerie et al		370	347
31	5850596	1998-12-15	Reynolds		455	63.1
32	6307839	2001-10-23	Gerszberg et al		370	235
33	5655217	1997-08-05	Lamson		455	513
34	5889772	1999-03-30	Fischer et al		370	346
35	6031833	2000-02-29	Fickes et al		370	349
36	5636140	1997-06-03	Lee et al		370	469
37	6295461	2001-09-25	Palmer et al		455	557
38	5732077	1998-03-24	Whitehead		370	349
39	5864541	1991-01-26	Abu-Amara et al		370	253
40	5428819	1995-06-27	Wang et al		455	454
41	6167237	2002-12-16	Rapeli	B1	455	63

42	6374079	2002-04-16	Hsu	B1	455	11.1
43	5636903	1997-12-09	Mahany		395	200.58
44	6212566	2001-04-03	Vanhoof et al	B1	709	230

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
1	1	20030123420	2003-07-03	Sherlock	A1	370	338
2	2	20020086641	2002-07-04	Howard	A1	455	67.1
3	3	20020155811	2002-10-24	Prismantas et al	A1	455	226.1
4	4	20020142744	2002-10-03	Okanoue et al	A1	455	226.1
5	5	20020177446	2002-11-28	Bugeja et al	A1	455	450
6	6	20020050012	2003-03-13	Black et al	A1	455	62
7	7	20020019214	2002-02-14	Brown et al	A1	455	67.11
8	8	20020085503	2002-07-04	Hulyalkar et al	A1	370	252
9	9	20020154614	2002-10-24	Jagger et al	A1	375	332
10	10	20010008837	2001-07-19	Takahashi	A1	455	403
11	11	20020077787	2002-06-20	Rappaport et al	A1	702	188
12	12	20020006799	2002-01-17	Rappaport et al	A1	455	446
13	13	20020111772	2002-08-15	Skidmore et al	A1	702	186
14	14	20030198200	2003-10-23	Diener et al	A1	370	329
15	15	20030198304	2003-10-23	Sugar et al	A1	375	340
16	16	20030224741	2003-12-04	Sugar et al	A1	455	115.1
17	17	20040023674	2004-02-05	Miller	A1	455	462
18	18	20040028003	2004-02-12	Diener et al	A1	370	319
19	19	20040028123	2004-02-12	Sugar et al	A1	375	224

Signature

Examiner Name	Date
WILLIAM CUMMINGS PRIMARY EXAMINER	9/8/06



COGNIO, INC.  
101 ORCHARD RIDGE DRIVE, SUITE 350  
GAITHERSBURG, MARYLAND 20878

## LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio109US  
SERIAL NO.: 10/717,852  
APPLICANT(S): Diener et al.

GROUP ART UNIT: 2681  
FILING DATE: November 19, 2003  
TODAY'S DATE: March 14, 2004

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class/Subclass	Translation (Yes or No)
AA	JP 2000-022712	01/21/2000	Japan		Yes, Partial

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
BA	Monks et al., "A Power Controlled Multiple Access Protocol for Wireless Packet Networks," 2001, IEEE Infocom 2001. <u>NO MONTH LISTED</u>
BB	Vaduvur Bharghavan, "Performance Evaluation of Algorithms for Wireless Medium Access," 1998, IPDS. <u>NO MONTH LISTED</u>
BC	Garces et al., "Collision Avoidance and Resolution Multiple Access for Multichannel Wireless Networks," 1997, IEEE Infocom. <u>NO MONTH LISTED</u>
BD	Howitt et al., "Coexistence in the 2.4 GHz ISM Band," unknown publication date.
BE	Cisco, "New Product: CiscoWorks Wireless LAN Solution Engine Software Version 1.0," July 19, 2002.
BF	Joe McGarvey, "Wi-Fi Moves Into Management Stage," July 19, 2002. 802.11planet.
BG	Wildpackets Inc., "A Wildpackets Academy Tutorial; AiroPeek and Wireless Security: Identifying and Locating Rogue Access Points," 2002. <u>NO MONTH LISTED</u>
BH	Satapathy et al., "Etiquette Modification for Unlicensed Spectrum: Approach and Impact," May 1998, Proceedings of the IEEE Vehicular Technology Conference, vol. 1, pgs 272-276.
BI	Dewayne Hendricks, "Is there Part 15 Congestion? Part II," September 27, 2000, FCC TAC.
BJ	FCC, "Report: Second Meeting of FCC Technological Advisory Council II," November 28, 2001.
BK	FCC, "Report: First Meeting of FCC Technological Advisory Council II," August 26, 2001.
BL	Stamatelos et al., "Spectral Efficiency and Optimal Base Placement for Indoor Wireless Networks," May, 1996, IEEE Journal on Selected Areas in Communications.

**COGNIO, INC.**  
 101 ORCHARD RIDGE DRIVE, SUITE 350  
 GAITHERSBURG, MARYLAND 20878

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio109US      GROUP ART UNIT: 2681  
 SERIAL NO.: 10/717,852      FILING DATE: November 19, 2003  
 APPLICANT(S): Diener et al.      TODAY'S DATE: March 14, 2004

	<del>Aegis Systems Limited, "Excerpt from Aegis Systems Limited: Chapter C Technical Factors Affecting Spectrum Management,"</del>
BM	<del>publication date unknown.</del>
BN	Jon Peha, "Spectrum Management Policy Options," 1998, IEEE Communications Surveys, Vol. 1, No. 1.
BO	Zafar Maseed, "Interference Characterization in Unlicensed-National Information Infrastructure (U-NII) Band," unknown publication date.
BP	Stefan Pettersson, "Performance and Implementation Aspects of Wireless Indoor Communication Systems with Local Centralization," April, 2000, Dissertation submitted to the Royal Institute of Technology.
BQ	Mobilian Corporation, "Wi-Fi™ (802.11b) and Bluetooth™: An Examination of Coexistence Approaches," 2001. <u>NO MONTH LISTED</u>
BR	Net@EDU, "Wireless Campus Working Group: Position Paper on WLAN Radio Frequency Interference Issues," unknown publication date.
BS	BBN Technologies, "Using Signal Processing to Analyze Wireless Data Traffic," May 22, 2002, BBN Technical Memorandum No. 1321
BT	ISCO International, "Interference Solutions: Improve Performance Realize New Traffic," October 1, 2002, CDG Technology Forum.
BU	Dewayne Hendricks, "Is there Part 15 Congestion?," June 28, 2000, FCC TAC.
BV	Ricardo Rodrigues et al., "On the Design and Capacity Planning of a Wireless Network," 2000, IEEE. <u>NO MONTH LISTED</u>
BW	Charles Jackson, "Distributed Channel Assignment: The Tragedy of the Commons, Obbers's Paradox, and Mad Cow Disease," March 30, 2001, GWU ECE Colloquium.
BX	Kevin Werbach, "Open Spectrum: The Paradise of the Commons," November 20, 2001, Release 1.0, Ester Dysons Monthly Rept, Vol 19, No. 10.
BY	Interlink Networks, "A Practical Approach to Identifying and Tracking Unauthorized 802.11 Cards and Access Points," 2002. <u>NO MONTH LISTED</u>
BZ	Rodrigo Garces, "An Access Etiquette for Very-Wide Wireless Bands," October 12, 1998, IEEE IC3N '98: Seventh International Conference on Computers.
CA	K. Konston, "In Pursuit of A Wireless Bill of Rights," September 18, 2002, Spectrum Management Working Group FCC-TAC, pgs 1-15.
CB	Michael Yang et al., "On the Use of Unlicensed Frequency Spectrum, Use Rule Evolution, and Interference Mitigation," January 18, 2001, Adaptive Broadband.

**COGNIO, INC.**  
 101 ORCHARD RIDGE DRIVE, SUITE 350  
 GAITHERSBURG, MARYLAND 20878

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio109US  
 SERIAL NO.: 10/717,852  
 APPLICANT(S): Diener et al.

GROUP ART UNIT: 2681  
 FILING DATE: November 19, 2003  
 TODAY'S DATE: March 14, 2004

<i>MC</i>	Jon M. Peha, "Wireless Communications and Coexistence for Smart Environments," October 2000, IEEE Personal Communications.
<i>CD</i>	Durga P. Satapathy et al., "Spectrum Sharing Without Licenses: Opportunities and Dangers," 1996, Proceedings of the Telecommunications Policy Research Conference. <i>LA MARCH 11, 2004</i>
<i>CE</i>	Xiaoxin Qui et al., "Network-Assisted Resource Management for Wireless Data Networks," July 2001, IEEE Journal on Selected Areas of Communications, Vol. 19, No. 7.
<i>CF</i>	Durga P. Satapathy et al., "A Novel Co-existence Algorithm for Unlicensed Fixed Power Devices," September 2000, IEEE Wireless Communications and Networking Conference.
<i>CG</i>	PCT Search Report from PCT application No. PCT/US03/13563 filed April 22, 2003.

EXAMINER

**WILLIAM CUMMANG**  
 PRIMARY EXAMINER

DATE CONSIDERED

*June 8, 2006*

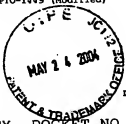
- \* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s)



## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18  
Stylesheet Version v18.0

Title of Invention	Server and Multiple Sensor System for Monitoring Activity in a Shared Frequency Band						
Application Number: 10/717852							
Confirmation Number: 1708							
First Named Applicant: Neil Diener							
Attorney Docket Number: Cognio109US							
Art Unit: 2681							
Search string: ( 6629151 or 6226680 ).pn.							
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6629151	2003-09-30	Bahl	B1	709	250
	2	6226680	2001-05-01	Boucher et al.	B1	709	230
Signature							
Examiner Name				Date			
WILLIAM CUMMINGS PRIMARY EXAMINER							



COGNIO, INC.  
101 ORCHARD RIDGE DRIVE, SUITE 350  
GAITHERSBURG, MARYLAND 20878

## LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio109US  
SERIAL NO.: 10/717,852  
APPLICANT(S): Diener et al.

GROUP ART UNIT: 2681  
FILING DATE: November 19, 2003  
TODAY'S DATE: May 21, 2004

\*\*\*\*\*

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class/Subclass	Translation (Yes or No)
<i>BA</i>	WO 03/028313 A2	April 3, 2003	PCT	H04L 12/56	<i>—</i>
BB					

EXAMINER

**WILLIAM CLARKING**  
PRIMARY EXAMINER

DATE CONSIDERED

*June 8, 2006*

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s)





COGNIO, INC.

101 ORCHARD RIDGE DRIVE, SUITE 350  
GAITHERSBURG, MARYLAND 20878

## LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio109USSERIAL NO.: 10/717,852APPLICANT(S): Diener et al.GROUP ART UNIT: 2681FILING DATE: November 19, 2003TODAY'S DATE: September 29, 2004

## U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Publication or Issue Date	Filing Date (if relevant)	Name	Class/Subclass
<u>AA</u>	5,930,733	07/27/1999	03/25/1997	Park et al.	702/76
<u>AB</u>	2003/0021237 A1	01/30/2003	06/07/2002	Min et al.	370/252
<u>AC</u>	2003/0050070 A1	03/13/2003	03/14/2002	Mashinsky et al.	455/452
<u>AD</u>	6,131,013	10/10/2000	01/30/1998	Bergstrom et al.	455/63
<u>AE</u>	6,584,175 B1	06/24/2003	11/12/1999	Kibria et al.	379/1.03

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial	Author, Title, Date, Pertinent Pages, Etc
<u>BA</u>	<del>per Search Report in International application number-</del> <del>ECT/US03/36866</del> <u>no date</u>
<u>CB</u>	

EXAMINER

PRIMARY EXAMINER  
WILLIAM CUMBERG

DATE CONSIDERED

June 8, 2006

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s)

WILLIAM CUMBERG  
PRIMARY EXAMINER

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**

---